REMARKS

Claims 1 and 3-51 are pending, with claims 1, 24, and 42 being independent. Claims 13 and 33 have been amended and claims 46-51 have been added. Support for the amendments and new claims can be found in the originally-filed specification, at least at page 5, line 1 to page 6, line 10; page 10, line 5 to page 11, line 10; and Figs 1 and 5. No new matter has been introduced.

The undersigned thanks the Examiner for the telephone interview granted on May 16, 2007. During that interview, the undersigned proposed to amend the specification to clarify that the "measuring devices" are elements 67-69 and to amend claims 13 and 33 to clarify that the measuring devices also include "measuring components," which are represented as elements 64-66 in Fig. 3. Additionally, the undersigned pointed out that the apparent ohmic resistances 76-78 are resistors. The amendments to the specification and to claims 13 and 33 reflect the amendments proposed during the interview. No new matter has been introduced.

Drawings

The drawings have been objected to for allegedly failing to show the measuring device of claims 13 and 33. Applicants have amended the specification at page 6, lines 29-30, to recite that the current supply modules 60 - 62 can include measuring devices 67-69 for measuring one or several output quantities such as voltage, current, and/or power. Thus, each measuring device 67-69 of Fig. 3 includes a measuring component 64-66, a signal matching circuit 70-72, a voltage/current converter 73-73, and a resistor 76-78. See the specification at page 7, lines 4-15, and Fig. 3. Applicants have also amended claims 13 and 33 to specify that each measuring device includes a measuring component, a signal matching circuit, a voltage/current converter, and a resistor. As discussed above, such a measuring device is shown, for example, in Fig. 3 as the measuring devices 67-69, and each measuring device of Fig. 3 includes a resistor 76-78. Accordingly, applicant requests withdrawal of this objection to the drawings.

In addition, the drawings have been objected to for allegedly failing to show that the measuring signals of the current supply modules are supplied to a control unit of a current supply

unit in parallel via a data connection, as recited in claims 14 and 34. Applicants request withdrawal of this rejection, because Fig. 3 shows that the measuring signals of the current supply modules 60-62 are supplied to the control unit 79 of the current supply unit 63 in parallel. In particular, each output of the current supply module 60-62 is directly connected to the control unit 79, and therefore, the measuring signals from the current supply modules 60-62 are supplied to the control unit 79 in parallel.

For at least the above reasons, applicants request withdrawal of the objection to the drawings.

Claim Rejections – 35 U.S.C. § 112

Claims 13 and 33 have been objected to because the specification and drawings allegedly fail to disclose a resistor for generating a voltage drop, where such resistor is found in a measuring device. Applicants request withdrawal of this rejection because the specification explains at page 7, lines 4-15, that apparent ohmic resistances 76-78 (which are resistors) are provided within the measuring devices 67-79 for generating a voltage drop and such a design is shown in Fig. 3.

Claim Rejections – 35 U.S.C. § 103

Claims 1, 3-5, 11, 12, 14-16, 18-21, 23-25, 31, 32, 34, 35, 37-39, and 41-45 have been rejected as allegedly being unpatentable over U.S. Patent No. 5,815,388 (Manley) in view of U.S. Publication No. 2003/0111909 (Liu). Applicants request withdrawal of this rejection because neither Manley, Liu, nor any proper combination of the two describes or suggests multiple current supply modules (claims 1 and 42) or power converter modules (claim 24) that are electrically combined to form a current supply unit having a maximum output power that is greater than the maximum output power of the individual current supply modules (claims 1 and 42) or power converter modules (claim 24), as recited in independent claims 1, 24, and 42.

Manley relates to a bi-directional converter circuit 211 having a power supply 212 that provides power to supply a voltage potential across a first electrode 214 and a second electrode 216 mounted within a process or vacuum chamber 218. See Manley at col. 12, lines 47-67, and Fig. 6. However, as the Office notes that Manley "fails to teach a plurality of power supply

modules", Manley's bi-directional converter circuit 211 lacks multiple current supply modules or power converter modules. Rather, Manley's bi-directional converter circuit 211 has a single power supply 212. Thus, Manley necessarily also fails to describe or suggest that such modules would be electrically combined to form a current supply unit as recited in the pending claims.

Realizing the deficiency of Manley, the Office cites Liu, and argues that it would have been obvious to modify Manley with the plurality of power supplies 214 described in Liu. However, while Liu's power supplies 214 supply power to a load 104, Liu never describes or suggests that they are, or should be, combined to form a current supply unit having a maximum output power that is greater than the maximum output power of the individual power supplies 214. The Office apparently realizes this deficiency in Liu and argues (at page x) that the "maximum output" of the power supplies 214 in Liu is the amount set by the load controller 518. Applicant disagrees.

The term "maximum output" requires that the output be a "maximum" and that means (by definition of the term "maximum") that the output is the greatest quantity or value attainable or attained by the modules. In Liu, the greatest quantity attainable by the power supplies 214 is not the amount set by the load controller 518. Rather, as Liu explains, the greatest quantity attainable by each of the power supplies 214 will be the value required by the load 104 (for example, if the load requires 100 units of power, the power supply 214 is configured to have a maximum output of 100 W). See Liu at paragraph 0050. In this way, one power supply 214 in the pair in Liu's system can supply 100% of the value required by the load 104 because Liu's system is a load sharing system. For example, each power supply 214A and 214B can supply 100% of the power to the load 104B; but, the power supplied to the load 104B is 100%. Thus, in Liu, the maximum output power of the combination of power supplies 214A and 214B is only 100%, which is not greater than the maximum output power of each of the power supplies 214A and 214B.

For at least these reasons, Liu also fails to describe or suggest multiple modules that are electrically combined to form a current supply unit having a maximum output power that is greater than the maximum output power of the individual modules. Any proper combination of Liu and Manley would still fail to describe or suggest such a current supply unit. Accordingly, claims 1, 24, and 42 are allowable over any proper combination of Liu and Manley. Claims 3-5,

11, 12, 14-16, 18-21, 23, 25, 31, 32, 34, 35, 37-39, 41, and 43-45 depend from one of the independent claims, and are allowable for at least the reasons that the independent claims are allowable, and for containing allowable subject matter in their own right.

Claims 6-10 and 26-30 have been rejected as allegedly being unpatentable over Manley in view of Liu and U.S. Patent No. 6,362,540 (Hill). Claims 6-10 and 26-30 depend from claims 1 or 24, which were rejected as being unpatentable over Manley in view of Liu. As discussed above, any proper combination of Manley and Liu would still fail to describe or suggest multiple modules that are electrically combined to form a current supply unit having a maximum output power that is greater than the maximum output power of the individual modules, as recited in independent claims 1 and 24. Moreover, Hill does not remedy the failure of Manley and Liu to describe or suggest this subject matter. In Hill, power blocks 22 supply a current to an electrical load 26. See Hill at abstract and Fig. 1. However, Hill never describes or suggests that an output power to the electrical load 26 is greater than a maximum output power of each power block 22. Accordingly, claims 1 and 24 are allowable over any proper combination of Liu, Manley, and Hill.

Claims 6-10 and 26-30 are allowable for at least the reasons that claims 1 and 24 are allowable and for containing allowable subject matter in their own right. For example, claim 6 recites that each current supply module includes a receptacle for receiving the control unit. Neither Manley, Liu, nor Hill describes or suggests such a receptacle. The Office points to element 608 of Liu as somehow showing such a receptacle, and suggests that Liu's MAPM 304 is received in the element 608. However, element 608 of Liu is a backplane connector and there is no description that it is a receptacle that receives the MAPM 304 (which the Office equates with the recited control unit). Rather, as Liu explains at paragraph 0065, the backplane connector 608 is connected to the power supply board 212, and enables connection of the power supply board 212 to the power backplane 208. See Liu at Fig. 6.

Claims 13 and 33 have been rejected as being allegedly unpatentable over Manley in view of Liu and U.S. Patent No. 6,166,455 (Li). Claims 13 and 33 depend, respectively, from claims 1 or 24, which were rejected as being unpatentable over Manley in view of Liu. As discussed above, any proper combination of Manley and Liu would still fail to describe or suggest multiple modules that are electrically combined to form a current supply unit having a

maximum output power that is greater than the maximum output power of the individual modules, as recited in independent claims 1 and 24. Moreover, Li does not remedy the failure of Manley and Liu to describe or suggest this subject matter.

In Li, a power supply includes a plurality of separable power supply modules 100, 100' coupled together to supply current to a load 136. See Li at abstract and Fig. 1. However, Li never describes or suggests that the an output power to the load 136 is greater than a maximum output power of each power supply module 100, 100'. Accordingly, claims 1 and 24 are allowable over any proper combination of Liu and Li. Claims 13 and 33 are allowable for at least the reasons that claims 1 and 24 are allowable.

Claims 17 and 36 have been rejected as allegedly being unpatentable over Manley in view of Liu and U.S. Patent No. 5,675,480 (Stanford). Claims 17 and 36 depend, respectively, from claims 1 and 24, which were rejected as being unpatentable over Manley in view of Liu. As discussed above, any proper combination of Manley and Liu would still fail to describe or suggest multiple modules that are electrically combined to form a current supply unit having a maximum output power that is greater than the maximum output power of the individual modules, as recited in independent claims 1 and 24. Moreover, Stanford does not remedy the failure of Manley and Liu to describe or suggest this subject matter. In Stanford, a power supply includes power supply modules 162 that drive a supply bus 75 in parallel. See Stanford at col. 6, lines 26-58 and Fig. 6. However, Stanford never describes or suggests that an output power to the bus 75 is greater than a maximum output power of each power supply module 162.

Accordingly, claims 1 and 24 are allowable over any proper combination of Liu and Stanford. Claims 17 and 36 are allowable for at least the reasons that claims 1 and 24 are allowable, and for containing allowable subject matter in their own right.

Claims 22 and 40 have been rejected as allegedly being unpatentable over Manley in view of Liu and U.S. Patent No. 7,061,139 (Young). Claims 22 and 40 depend, respectively, from claims 1 and 24, which were rejected as being unpatentable over Manley in view of Liu. As discussed above, any proper combination of Manley and Liu would still fail to describe or suggest multiple modules that are electrically combined to form a current supply unit having a maximum output power that is greater than the maximum output power of the individual

modules, as recited in independent claims 1 and 24. Moreover, Young does not remedy the failure of Manley and Liu to describe or suggest this subject matter.

In Young, a power system 8 supplies a three phase power to a critical load 14 such as a computer, a controller for a computer, or an electronic data processing device. See Young at col. 5, lines 20-38 and Fig. 3. However, Young never describes or suggests that the power system 8 includes power supply modules that are electrically combined to form a current supply unit. Accordingly, claims 1 and 24 are allowable over any proper combination of Liu and Young. Claims 22 and 40 are allowable for at least the reasons that claims 1 and 24 are allowable.

New Claims

New claims 46-51 depend from claim 42, and are allowable for at least the reasons that claim 42 are allowable, and for containing allowable subject matter in their own right. For example, claim 50 recites that the method also includes reconfiguring the established electrical connection between the multiple first current supply modules to form the first current supply unit having another first maximum power output that is different from the first maximum power output, and claim 51 recites that such reconfiguring includes changing the electrical connection between the multiple first current supply modules. None of the cited art describes or suggest such reconfiguration.

Conclusion

In conclusion, applicant submits that all claims are in condition for allowance. The fee for $300.00 for excess claims is being paid concurrently with the Electronic Filing System (EFS). Please apply all charges or credits to deposit account 06-1050, referencing Attorney Docket No. 15440-019001.

Respectfully submitted,

Date: June 18, 2007

/Diana DiBerardino/
Diana DiBerardino
Reg. No. 45,653

Fish & Richardson P.C.
1425 K Street, N.W.
11th Floor
Washington, DC 20005-3500
Telephone: (202) 783-5070
Facsimile: (202) 783-2331